

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
23 October 2003 (23.10.2003)

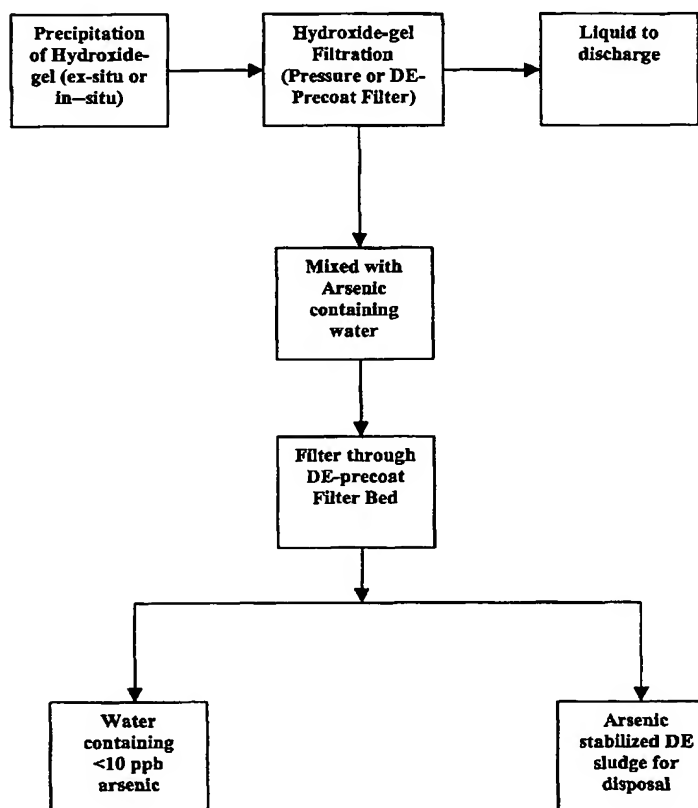
PCT

(10) International Publication Number
WO 2003/086564 A3

- (51) International Patent Classification⁷: **C02F 1/28**
- (21) International Application Number:
PCT/US2003/011010
- (22) International Filing Date: 10 April 2003 (10.04.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/371,773 10 April 2002 (10.04.2002) US
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- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),

[Continued on next page]

(54) Title: REMOVAL OF ARSENIC FROM DRINKING AND PROCESS WATER



(57) Abstract: A method of removing arsenic and heavy metals from water using metal salt hydroxidegels is provided. The arsenic present in water is adsorbed onto the hydroxide-gels which can effectively be filtered through a diatomaceous earth (DE) filtration bed. The combination of DE mixed hydroxide-gels is also effective in removing arsenic from water and heavy metals from water.

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Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(88) Date of publication of the international search report:
19 February 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/11010

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C02F 1/28

US CL : 210/667

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 210/667, 665, 681, 688, 705, 714, 716, 717, 724, 728, 777, 778, 911, 912; 252/175, 179; 502/405, 406

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
NONE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,197,201 B1 (MISRA et al.) 06 March 2001, col. 4 line 4 through col. 6 line 42, and col. 11 lines 18-37	1-39
Y	US 5,064,531 A (WANG et al.) 12 November 1991, col. 2 line 50 through col. 3 line 26	4-8, 24
Y	US 5,683,953 A (MILLS) 04 November 1997, col. 4 line 56 through col. 8 line 28	6, 7, 10, 11, 15-26, 29-39
Y	US 5,432,077 A (FARRAH) 11 July 1995, col. 3 line 52 through col. 5 line 48	27-39
A	US 5,547,583 A (ALEXANDER) 20 August 1996	

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&"

document member of the same patent family

Date of the actual completion of the international search

21 October 2003 (21.10.2003)

Date of mailing of the international search report

11 DEC 2003

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